Exploring the Extreme			
2008 Science			
Next Generation Sunshine State Standards			
Florida Science			
Grade K			
Activity/Lesson	**State**	**Standards**	
Finding the Center of Gravity Using Rulers	FL	SCI.K.SC.K.N.1.A	Scientific inquiry is a multifaceted activity; The processes of science include the formulation of scientifically investigable questions, construction of investigations into those questions, the collection of appropriate data, the evaluation of the meaning of those data, and the communication of this evaluation.
Finding the Center of Gravity Using Rulers	FL	SCI.K.SC.K.N.1.1	Collaborate with a partner to collect information.
Exploring the Extreme			
2008 Science			
Next Generation Sunshine State Standards			
Florida Science			
Grade 1			
Activity/Lesson	**State**	**Standards**	
Finding the Center of Gravity Using Rulers	FL	SCI.1.SC.1.N.1.A	Scientific inquiry is a multifaceted activity; The processes of science include the formulation of scientifically investigable questions, construction of investigations into those questions, the collection of appropriate data, the evaluation of the meaning of those data, and the communication of this evaluation.
Finding the Center of Gravity Using Rulers	FL	SCI.1.SC.1.N.1.1	Raise questions about the natural world, investigate them in teams through free exploration, and generate appropriate explanations based on those explorations.
Exploring the Extreme			
2008 Science			
Next Generation Sunshine State Standards			
Florida Science			
Grade 2			
Activity/Lesson	**State**	**Standards**	
Finding the Center of Gravity Using Rulers	FL	SCI.2.SC.2.N.1.A	Scientific inquiry is a multifaceted activity; The processes of science include the formulation of scientifically investigable questions, construction of investigations into those questions, the collection of appropriate data, the evaluation of the meaning of those data, and the communication of this evaluation.

Finding the Center of Gravity Using Rulers	FL	SCI.2.SC.2.N.1.1	Raise questions about the natural world, investigate them in teams through free exploration and systematic observations, and generate appropriate explanations based on those explorations.
Finding the Center of Gravity Using Rulers	FL	SCI.2.SC.2.N.1.3	Ask "how do you know?" in appropriate situations and attempt reasonable answers when asked the same question by others.
Exploring the Extreme			
2008 Science			
Next Generation Sunshine State Standards			
Florida Science			
Grade 3			
Activity/Lesson	**State**	**Standards**	
Finding the Center of Gravity Using Rulers	FL	SCI.3.SC.3.N.1.A	Scientific inquiry is a multifaceted activity; The processes of science include the formulation of scientifically investigable questions, construction of investigations into those questions, the collection of appropriate data, the evaluation of the meaning of those data, and the communication of this evaluation.
Finding the Center of Gravity Using Rulers	FL	SCI.3.SC.3.N.1.C	Scientific argumentation is a necessary part of scientific inquiry and plays an important role in the generation and validation of scientific knowledge.
Finding the Center of Gravity Using Rulers	FL	SCI.3.SC.3.N.1.1	Raise questions about the natural world, investigate them individually and in teams through free exploration and systematic investigations, and generate appropriate explanations based on those explorations.
Finding the Center of Gravity Using Rulers	FL	SCI.3.SC.3.N.1.5	Recognize that scientists question, discuss, and check each others' evidence and explanations.
Finding the Center of Gravity Using Rulers	FL	SCI.3.SC.3.N.1.6	Scientific knowledge is based on observation and inference; it is important to recognize that these are very different things. Not only does science require creativity in its methods and processes, but also in its questions and explanations. Students will infer based on observation.
Finding the Center of Gravity Using Plumb Lines	FL	SCI.3.SC.3.N.1.A	Scientific inquiry is a multifaceted activity; The processes of science include the formulation of scientifically investigable questions, construction of investigations into those questions, the collection of appropriate data, the evaluation of the meaning of those data, and the communication of this evaluation.

Finding the Center of Gravity Using Plumb Lines	FL	SCI.3.SC.3.N.1.D	Scientific knowledge is based on observation and inference; it is important to recognize that these are very different things. Not only does science require creativity in its methods and processes, but also in its questions and explanations.
Finding the Center of Gravity Using Plumb Lines	FL	SCI.3.SC.3.N.1.1	Raise questions about the natural world, investigate them individually and in teams through free exploration and systematic investigations, and generate appropriate explanations based on those explorations.
Finding the Center of Gravity Using Plumb Lines	FL	SCI.3.SC.3.N.1.5	Recognize that scientists question, discuss, and check each others' evidence and explanations.
Finding the Center of Gravity Using Plumb Lines	FL	SCI.3.SC.3.N.3.3	Recognize that all models are approximations of natural phenomena; as such, they do not perfectly account for all observations.
Changing the Center of Gravity Using Moment Arms	FL	SCI.3.SC.3.N.1.A	Scientific inquiry is a multifaceted activity; The processes of science include the formulation of scientifically investigable questions, construction of investigations into those questions, the collection of appropriate data, the evaluation of the meaning of those data, and the communication of this evaluation.
Changing the Center of Gravity Using Moment Arms	FL	SCI.3.SC.3.N.1.C	Scientific argumentation is a necessary part of scientific inquiry and plays an important role in the generation and validation of scientific knowledge.
Changing the Center of Gravity Using Moment Arms	FL	SCI.3.SC.3.N.1.1	Raise questions about the natural world, investigate them individually and in teams through free exploration and systematic investigations, and generate appropriate explanations based on those explorations.
Changing the Center of Gravity Using Moment Arms	FL	SCI.3.SC.3.N.1.5	Recognize that scientists question, discuss, and check each others' evidence and explanations.
Changing the Center of Gravity Using Moment Arms	FL	SCI.3.SC.3.N.1.6	Scientific knowledge is based on observation and inference; it is important to recognize that these are very different things. Not only does science require creativity in its methods and processes, but also in its questions and explanations. Students will infer based on observation.
Changing the Center of Gravity Using Moment Arms	FL	SCI.3.SC.3.N.3.2	Recognize that scientists use models to help understand and explain how things work.
Changing the Center of Gravity Using Moment Arms	FL	SCI.3.SC.3.N.3.3	Recognize that all models are approximations of natural phenomena; as such, they do not perfectly account for all observations.

Exploring the Extreme			
2008 Science			
Next Generation Sunshine State Standards			
Florida Science			
Grade 4			
Activity/Lesson	**State**	**Standards**	
Finding the Center of Gravity Using Rulers	FL	SCI.4.SC.4.N.1.A	Scientific inquiry is a multifaceted activity; The processes of science include the formulation of scientifically investigable questions, construction of investigations into those questions, the collection of appropriate data, the evaluation of the meaning of those data, and the communication of this evaluation.
Finding the Center of Gravity Using Rulers	FL	SCI.4.SC.4.N.1.1	Raise questions about the natural world, use appropriate reference materials that support understanding to obtain information (identifying the source), conduct both individual and team investigations through free exploration and systematic investigations, and generate appropriate explanations based on those explorations.
Finding the Center of Gravity Using Plumb Lines	FL	SCI.4.SC.4.N.1.A	Scientific inquiry is a multifaceted activity; The processes of science include the formulation of scientifically investigable questions, construction of investigations into those questions, the collection of appropriate data, the evaluation of the meaning of those data, and the communication of this evaluation.
Finding the Center of Gravity Using Plumb Lines	FL	SCI.4.SC.4.N.1.1	Raise questions about the natural world, use appropriate reference materials that support understanding to obtain information (identifying the source), conduct both individual and team investigations through free exploration and systematic investigations, and generate appropriate explanations based on those explorations.
Changing the Center of Gravity Using Moment Arms	FL	SCI.4.SC.4.N.1.A	Scientific inquiry is a multifaceted activity; The processes of science include the formulation of scientifically investigable questions, construction of investigations into those questions, the collection of appropriate data, the evaluation of the meaning of those data, and the communication of this evaluation.

Changing the Center of Gravity Using Moment Arms	FL	SCI.4.SC.4.N.1.D	Scientific knowledge is based on observation and inference; it is important to recognize that these are very different things. Not only does science require creativity in its methods and processes, but also in its questions and explanations.
Changing the Center of Gravity Using Moment Arms	FL	SCI.4.SC.4.N.1.5	Compare the methods and results of investigations done by other classmates.
Changing the Center of Gravity Using Moment Arms	FL	SCI.4.SC.4.N.1.6	Keep records that describe observations made, carefully distinguishing actual observations from ideas and inferences about the observations.
Exploring the Extreme			
2008 Science			
Next Generation Sunshine State Standards			
Florida Science			
Grade 5			
Activity/Lesson	**State**	**Standards**	
Jet Propulsion	FL	SCI.5.SC.5.N.1.A	Scientific inquiry is a multifaceted activity; The processes of science include the formulation of scientifically investigable questions, construction of investigations into those questions, the collection of appropriate data, the evaluation of the meaning of those data, and the communication of this evaluation.
Jet Propulsion	FL	SCI.5.SC.5.N.1.C	Scientific argumentation is a necessary part of scientific inquiry and plays an important role in the generation and validation of scientific knowledge.
Jet Propulsion	FL	SCI.5.SC.5.N.1.1	Define a problem, use appropriate reference materials to support scientific understanding, plan and carry out scientific investigations of various types such as: systematic observations, experiments requiring the identification of variables, collecting and organizing data, interpreting data in charts, tables, and graphics, analyze information, make predictions, and defend conclusions.
Vectoring	FL	SCI.5.SC.5.N.1.A	Scientific inquiry is a multifaceted activity; The processes of science include the formulation of scientifically investigable questions, construction of investigations into those questions, the collection of appropriate data, the evaluation of the meaning of those data, and the communication of this evaluation.

Vectoring	FL	SCI.5.SC.5.N.1.C	Scientific argumentation is a necessary part of scientific inquiry and plays an important role in the generation and validation of scientific knowledge.
Exploring the Extreme			
2008 Science			
Next Generation Sunshine State Standards			
Florida Science			
Grade 6			
Activity/Lesson	**State**	**Standards**	
Jet Propulsion	FL	SCI.6.SC.6.N.1.A	Scientific inquiry is a multifaceted activity; The processes of science include the formulation of scientifically investigable questions, construction of investigations into those questions, the collection of appropriate data, the evaluation of the meaning of those data, and the communication of this evaluation.
Jet Propulsion	FL	SCI.6.SC.6.N.1.C	Scientific argumentation is a necessary part of scientific inquiry and plays an important role in the generation and validation of scientific knowledge.
Vectoring	FL	SCI.6.SC.6.N.1.A	Scientific inquiry is a multifaceted activity; The processes of science include the formulation of scientifically investigable questions, construction of investigations into those questions, the collection of appropriate data, the evaluation of the meaning of those data, and the communication of this evaluation.
Vectoring	FL	SCI.6.SC.6.N.1.C	Scientific argumentation is a necessary part of scientific inquiry and plays an important role in the generation and validation of scientific knowledge.
Exploring the Extreme			
2008 Science			
Next Generation Sunshine State Standards			
Florida Science			
Grade 7			
Activity/Lesson	**State**	**Standards**	
Jet Propulsion	FL	SCI.7.SC.7.N.1.A	Scientific inquiry is a multifaceted activity; The processes of science include the formulation of scientifically investigable questions, construction of investigations into those questions, the collection of appropriate data, the evaluation of the meaning of those data, and the communication of this evaluation.

Jet Propulsion	FL	SCI.7.SC.7.N.1.C	Scientific argumentation is a necessary part of scientific inquiry and plays an important role in the generation and validation of scientific knowledge.
Jet Propulsion	FL	SCI.7.SC.7.L.15.B	The scientific theory of evolution is supported by multiple forms of evidence.
Vectoring	FL	SCI.7.SC.7.N.1.A	Scientific inquiry is a multifaceted activity; The processes of science include the formulation of scientifically investigable questions, construction of investigations into those questions, the collection of appropriate data, the evaluation of the meaning of those data, and the communication of this evaluation.
Vectoring	FL	SCI.7.SC.7.N.1.C	Scientific argumentation is a necessary part of scientific inquiry and plays an important role in the generation and validation of scientific knowledge.
Center of Gravity, Pitch, Yaw	FL	SCI.7.SC.7.N.3.2	Identify the benefits and limitations of the use of scientific models.
Fuel Efficiency	FL	SCI.7.SC.7.N.3.2	Identify the benefits and limitations of the use of scientific models.
Exploring the Extreme			
2008 Science			
Next Generation Sunshine State Standards			
Florida Science			
Grade 8			
Activity/Lesson	**State**	**Standards**	
Jet Propulsion	FL	SCI.8.SC.8.N.1.A	Scientific inquiry is a multifaceted activity; The processes of science include the formulation of scientifically investigable questions, construction of investigations into those questions, the collection of appropriate data, the evaluation of the meaning of those data, and the communication of this evaluation.
Jet Propulsion	FL	SCI.8.SC.8.N.1.C	Scientific argumentation is a necessary part of scientific inquiry and plays an important role in the generation and validation of scientific knowledge.
Vectoring	FL	SCI.8.SC.8.N.1.A	Scientific inquiry is a multifaceted activity; The processes of science include the formulation of scientifically investigable questions, construction of investigations into those questions, the collection of appropriate data, the evaluation of the meaning of those data, and the communication of this evaluation.

Vectoring	FL	SCI.8.SC.8.N.1.C	Scientific argumentation is a necessary part of scientific inquiry and plays an important role in the generation and validation of scientific knowledge.
Center of Gravity, Pitch, Yaw	FL	SCI.8.SC.8.N.3.1	Select models useful in relating the results of their own investigations.
Fuel Efficiency	FL	SCI.8.SC.8.N.1.D	Scientific knowledge is based on observation and inference; it is important to recognize that these are very different things. Not only does science require creativity in its methods and processes, but also in its questions and explanations.
Fuel Efficiency	FL	SCI.8.SC.8.N.1.6	Understand that scientific investigations involve the collection of relevant empirical evidence, the use of logical reasoning, and the application of imagination in devising hypotheses, predictions, explanations and models to make sense of the collected evidence.